

385619118483201 Local number 110A N12 E28 01BBBA1

Basin and Range basin-fill aquifers

Mineral County, NV

LOCATION.--Lat 38°56'19.1", long 118°48'32.4" referenced to North American Datum of 1983, in NW ¼ NW ¼ NW ¼ sec.1, T.12 N., R.28 E., Mineral County, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 264 ft. Upper casing diameter 8.63 in; top of first opening 214 ft, bottom of last opening 244 ft.

WELL USE.--Withdrawal well.

DATUM.--Land-surface datum is 4180 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of steel casing, -2.7 ft below land-surface datum.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

[Measurement method: S, steel tape; T, electric tape. Water-level status: R, site had been pumped recently; --, static.]

| Date | Water level | Measurement method | Water level status |
|--------------|-------------|--------------------|--------------------|
| Nov 17, 2004 | 81.17 | S | R |
| Jan 20, 2005 | 81.31 | S | R |
| Mar 1 | 81.52 | T | -- |
| Apr 6 | 81.10 | T | R |
| May 10 | 80.77 | T | R |
| Jun 8 | 79.08 | T | -- |
| Jul 7 | 79.22 | T | -- |
| Aug 3 | 79.71 | T | -- |
| Sep 7 | 80.36 | T | -- |
| 29 | 80.34 | T | -- |

Highest: 79.08 Jun 08, 2005

Lowest: 81.52 Mar 01, 2005